

SPLIT TYPE  
ROOM AIR CONDITIONER  
WALL MOUNTED TYPE

# SERVICE MANUAL



Indoor unit	Outdoor unit
ASYA14LCC	AOYR14LCC
ASYA14LCC	AOYR14LCL
ASYA18LCC	AOYR18LCC
ASYA18LCC	AOYR18LCL

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# SPECIFICATIONS

## ELECTRICAL DATA

TYPE		Cooling & heating inverter	
INDOOR UNIT		ASYA14LCC	ASYA18LCC
OUTDOOR UNIT		AOYR14LC_	AOYR18LC_
COOLING CAPACITY		4.20 kW	5.20 kW
HEATING CAPACITY		5.60 kW	6.25 kW
POWER SOURCE		230 V	230 V
FREQUENCY		50 Hz	50 Hz
RUNNING CURRENT	Cooling	5.0 A	7.6 A
	Heating	6.4 A	7.7 A
INPUT WATTS	Cooling	1.11 kW	1.72 kW
	Heating	1.45 kW	1.73 kW
E.E.R.	Cooling	3.78 kW/kW	3.02 kW/kW
COP	Heating	3.86 kW/kW	3.61 kW/kW
MOISTURE REMOVAL		2.1 L/hr	2.8 L/hr
AIR CIRCULATION HIGH	Cooling	700 m <sup>3</sup> /hr	700 m <sup>3</sup> /hr
	Heating	700 m <sup>3</sup> /hr	700 m <sup>3</sup> /hr

## FAN MOTOR

POWER SOURCE		230 V	
INDOOR UNIT ( cool / heat )	High speed	1,480 r.p.m. / 1,480 r.p.m.	
	Middle speed	1,260 r.p.m. / 1,300 r.p.m.	
	Low speed	1,040 r.p.m. / 1,110 r.p.m.	
	Quiet	850 r.p.m. / 950 r.p.m.	
OUTDOOR UNIT ( cool / heat )		820 / 750 r.p.m.	860 / 820 r.p.m.

## NOISE LEVEL

INDOOR UNIT ( cool / heat )	High speed	44 dB / 42 dB	
	Middle speed	38 dB / 37 dB	
	Low speed	32 dB / 32 dB	
	Quiet	25 dB / 27 dB	
OUTDOOR UNIT ( cool / heat )		48 dB / 49 dB	50 dB / 50 dB

## COMPRESSOR AND REFRIGERANT

TYPE		Hermetic type, 4 pole, 3 phase, DC inverter motor, Rotary	
DISCRIMINATION		DA130A1F-25F	
PRECHARGED REFRIGERANT		1,150 g	
REFRIGERANT TYPE		R410A	
FULL CHARGE	Pipe length 15 m	1,150 g	
	20 m	1,250 g	
ADDITIONAL CHARGE		20 g/m	
MAXIMUM PIPE HEIGHT		15 m	

## DIMENSIONS

INDOOR UNIT	H x W x D	275 x 790 x 215 mm
OUTDOOR UNIT	H x W x D	578 x 790 x 300 mm

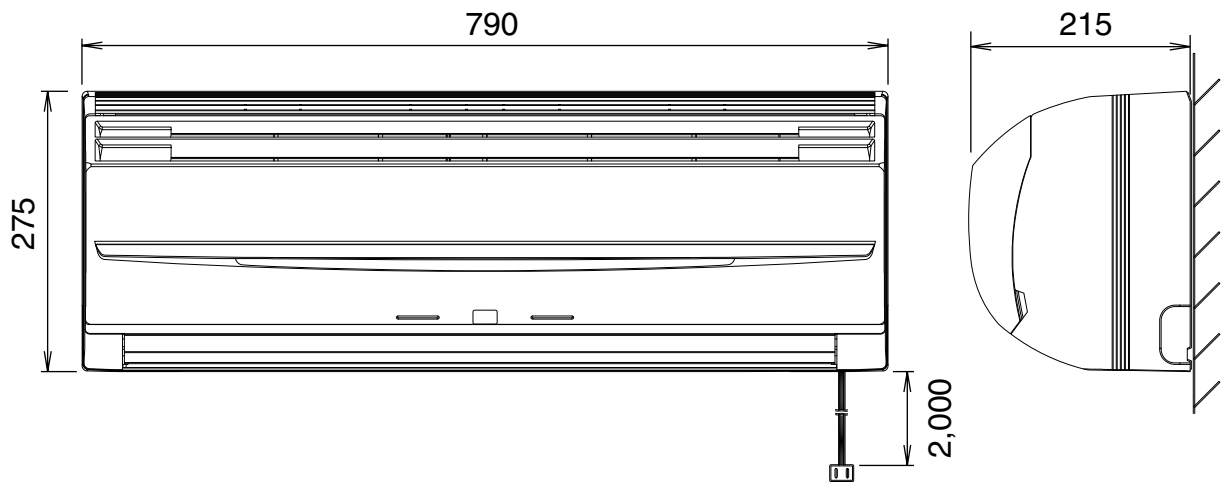
## WEIGHT

INDOOR UNIT	Gross / Net	12 kg / 9 kg
OUTDOOR UNIT	Gross / Net	44 kg / 40 kg

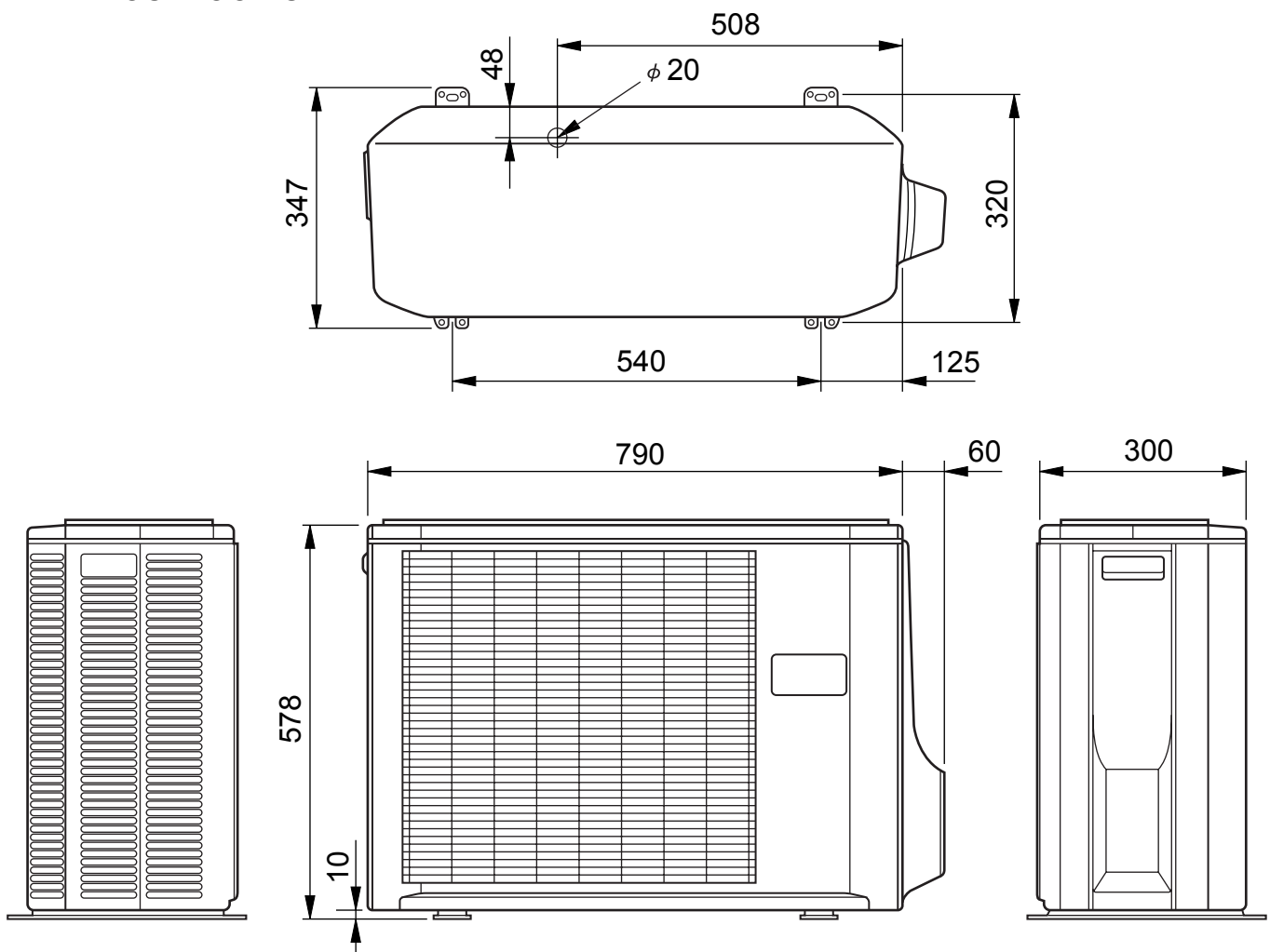
# DIMENSIONS

(unit : mm)

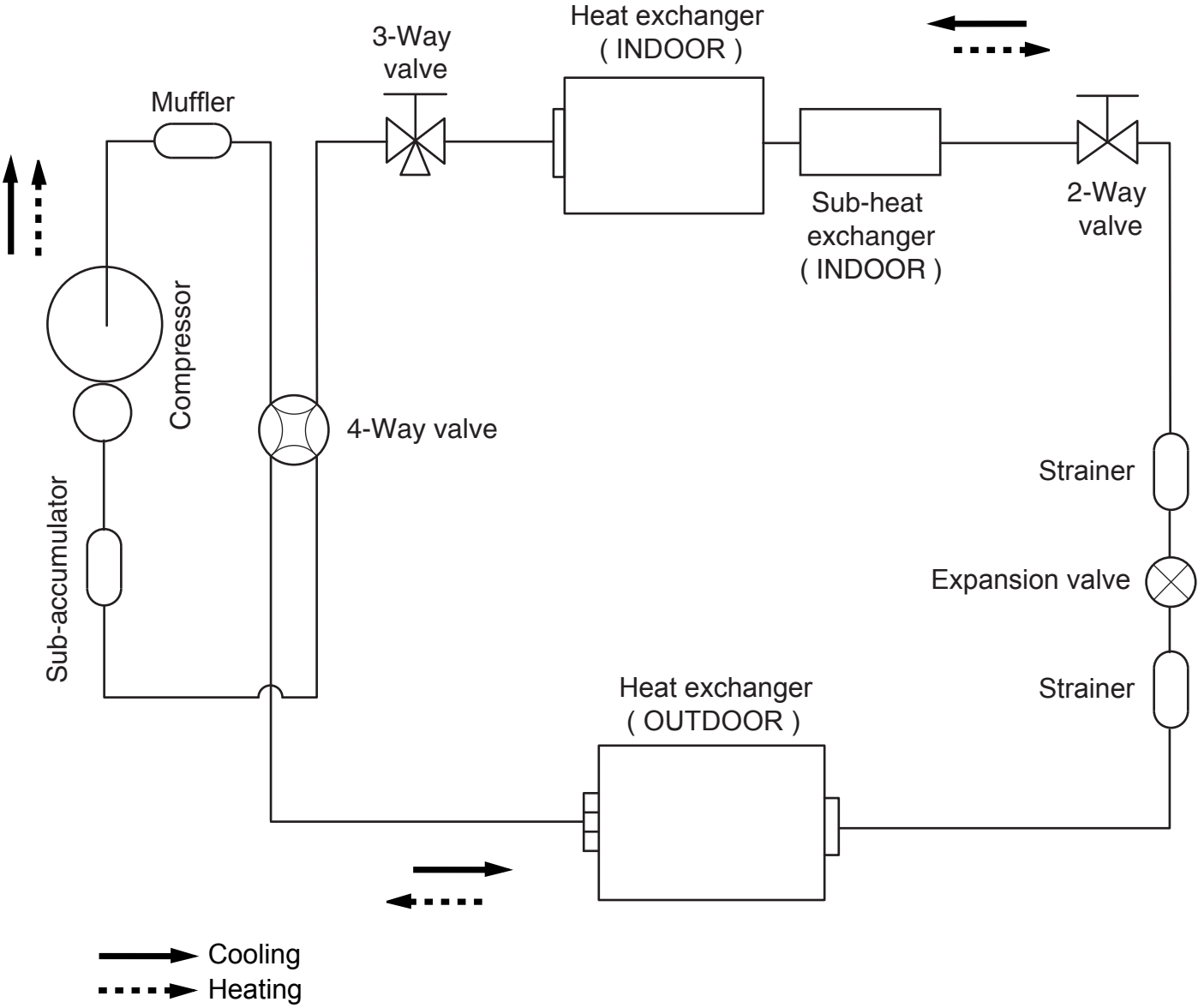
## INDOOR UNIT



## OUTDOOR UNIT



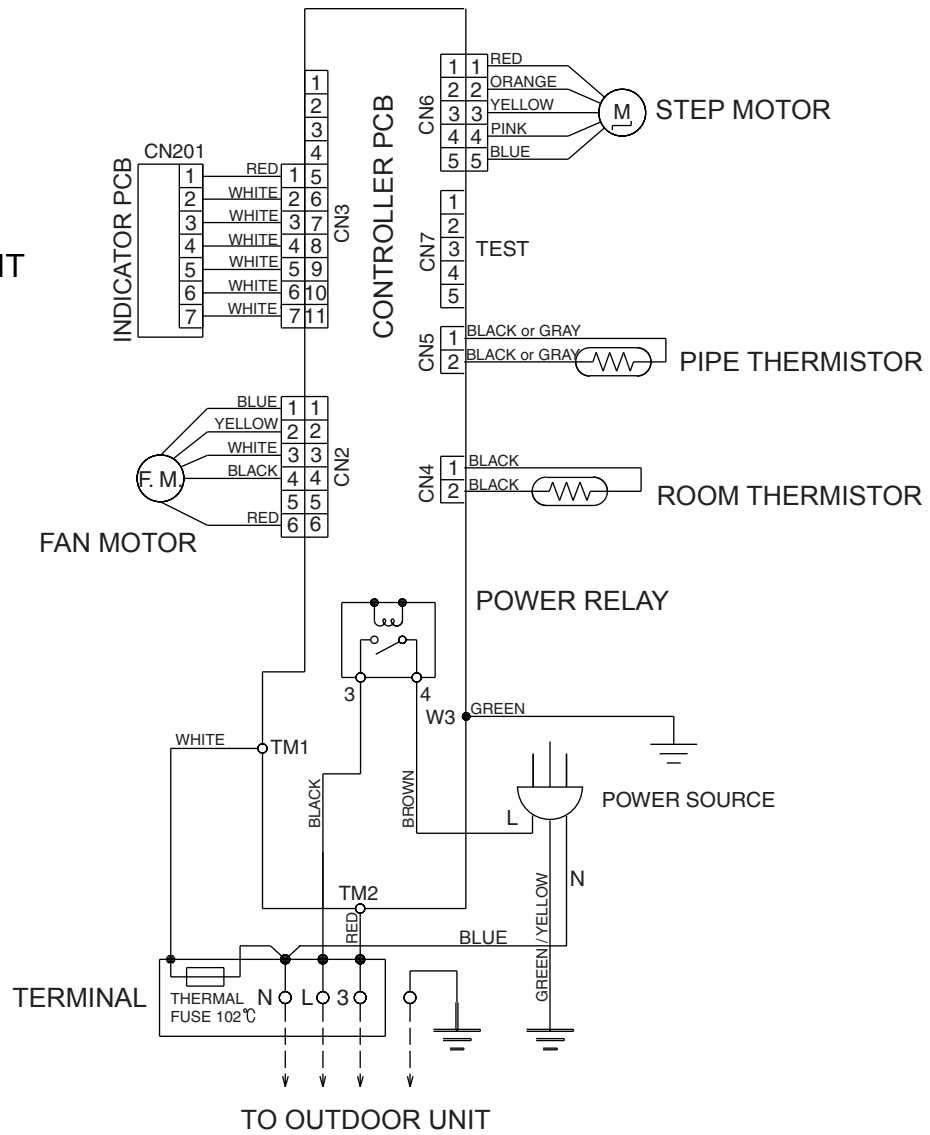
# REFRIGERANT SYSTEM DIAGRAM



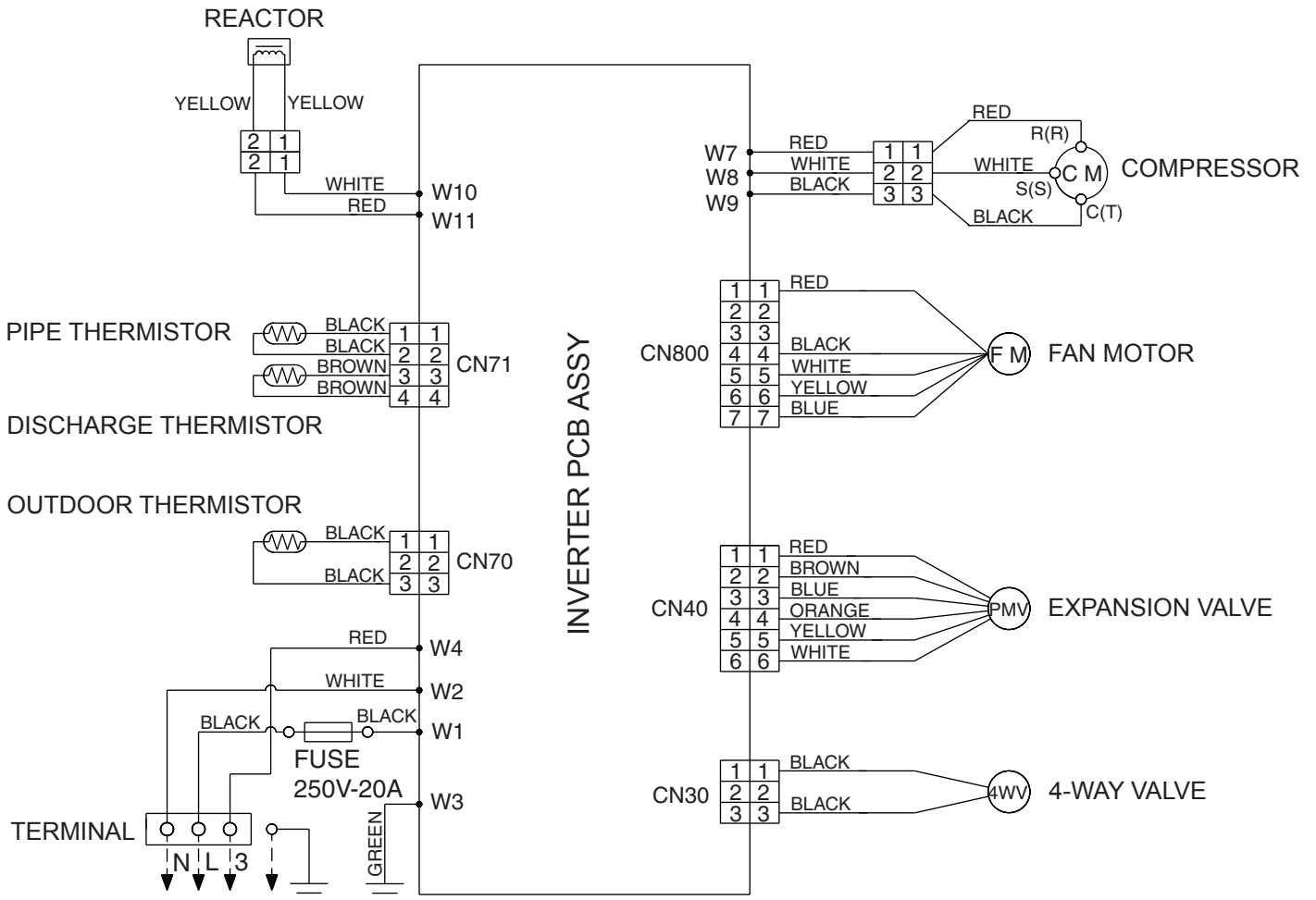
Refrigerant pipe diameter  
 Liquid : 1/4" (6.35 mm)  
 Gas : 1/2" (12.7 mm)

# CIRCUIT DIAGRAM

## INDOOR UNIT



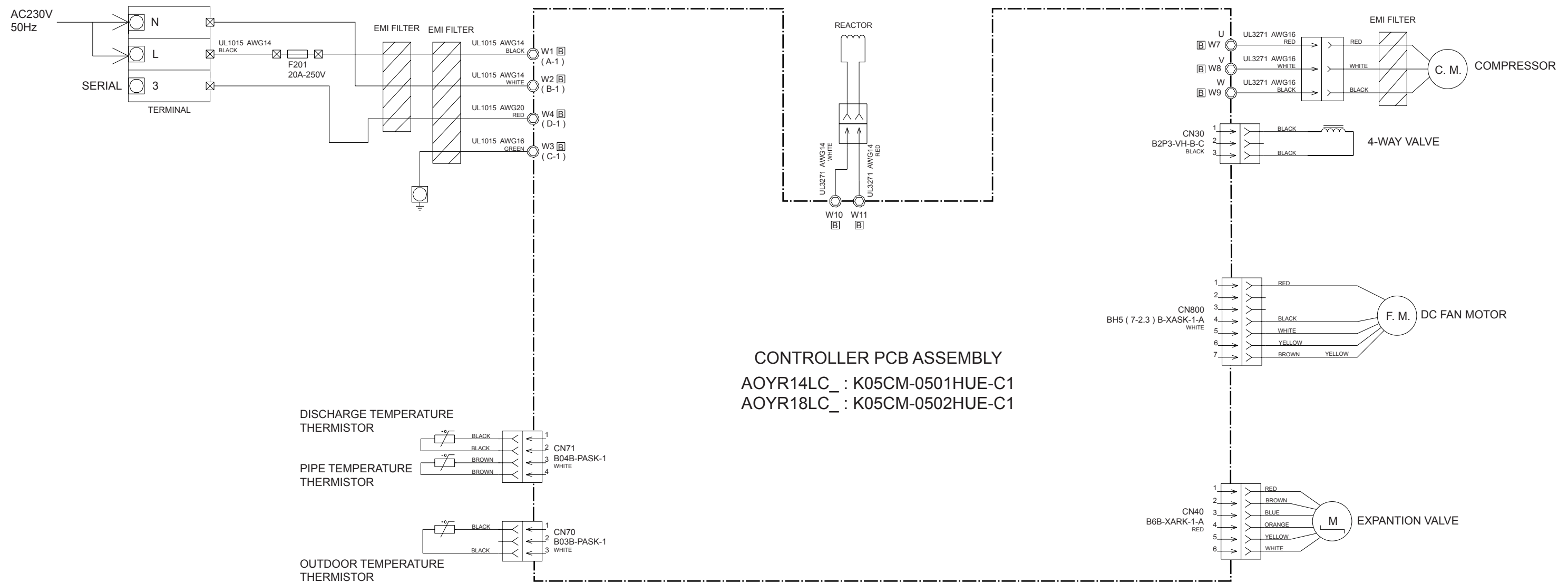
## OUTDOOR UNIT





# OUTDOOR PCB CIRCUIT DIAGRAM

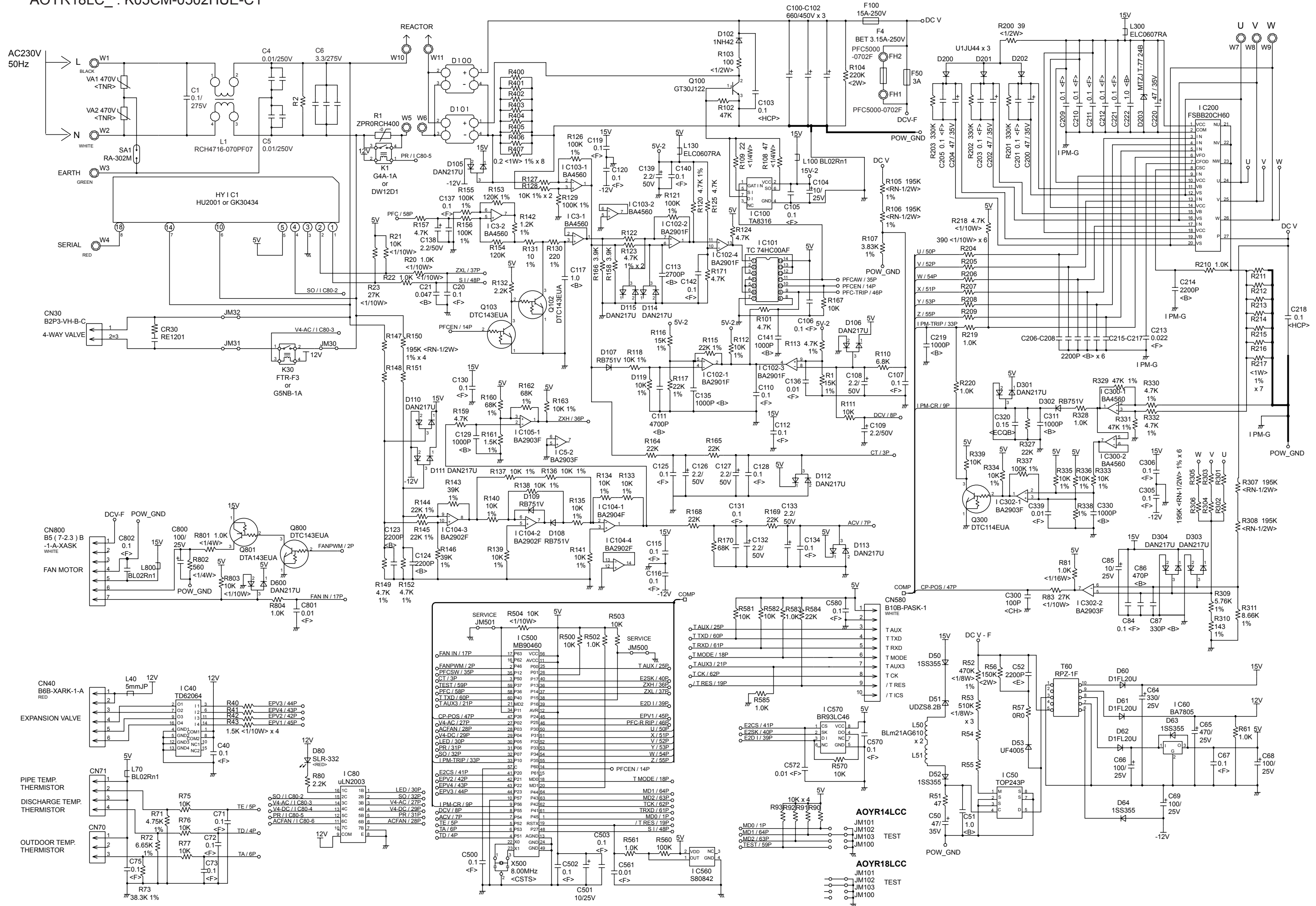
INVERTER ASSEMBLY  
 AOYR14LC\_ : EZ-0055HUE  
 AOYR18LC\_ : EZ-005WHUE



CONTROLLER PCB ASSEMBLY

AOYR14LC\_ : K05CM-0501HUE-C1

AOYR18LC\_ : K05CM-0502HUE-C1





# ERROR CONTENTS

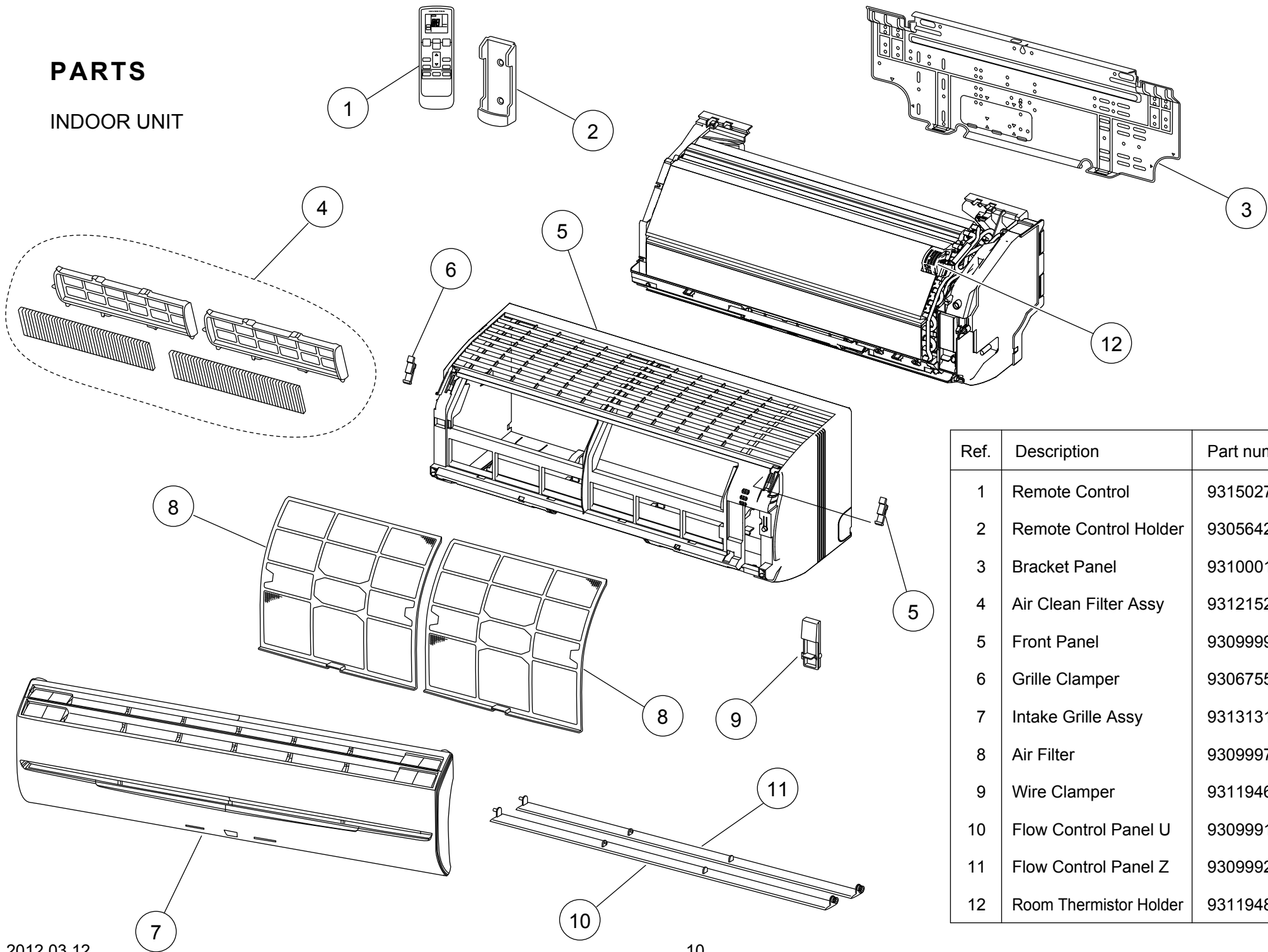
Error	Display		Error
	Operation LED	Timer LED	
Serial signal error	Normal	2 flash	Serial signal (reverse) error, at operation start up
		3 flash	Serial signal (reverse) error, during operation
		4 flash	Serial signal (forward) error, at operation start up
		5 flash	Serial signal (forward) error, during operation
Indoor unit thermistor error	2 flash	2 flash	Indoor temperature thermistor open / short
		3 flash	Heat exchanger middle thermistor open / short
Outdoor unit thermistor error	3 flash	2 flash	Discharge thermistor open / short
		3 flash	Heat exchanger thermistor open
		4 flash	Outdoor temperature thermistor open / short
Indoor unit control error	4 flash	2 flash	Forced automatic SW welded
		3 flash	Main relay welded
		4 flash	Power interruption error
		7 flash	VDD permanent stop protection
		8 flash	reverse VDD permanent stop protection
Outdoor unit control error	5 flash	2 flash	Current trip error
		3 flash	CT abnormal
		5 flash	Compressor location detection error
		6 flash	Outdoor unit fan drive system abnormal
Indoor fan motor error	6 flash	2 flash	Abnormal lock
		3 flash	Abnormal rotation
Refrigerant cycle error	7 flash	2 flash	Discharge Temperature abnormal
		3 flash	Cooling high pressure abnormal rise
Optional function error	8 flash	4 flash	PFC circuit error
Model information error	0.1 sec on/off	0.1 sec on/off	Model information error

#### OUTDOOR UNIT

LED	ERROR
on	Discharge temperature abnormal
0.5 second on / 0.5 second off	IPM overcurrent protection
0.1 second on / 0.1 second off	Thermistor abnormal
2.0 second on / 2.0 second off	CT abnormal
0.1 second on / 2.0 second off	Compressor location abnormal
5.0 second on / 5.0 second off	Fan abnormal

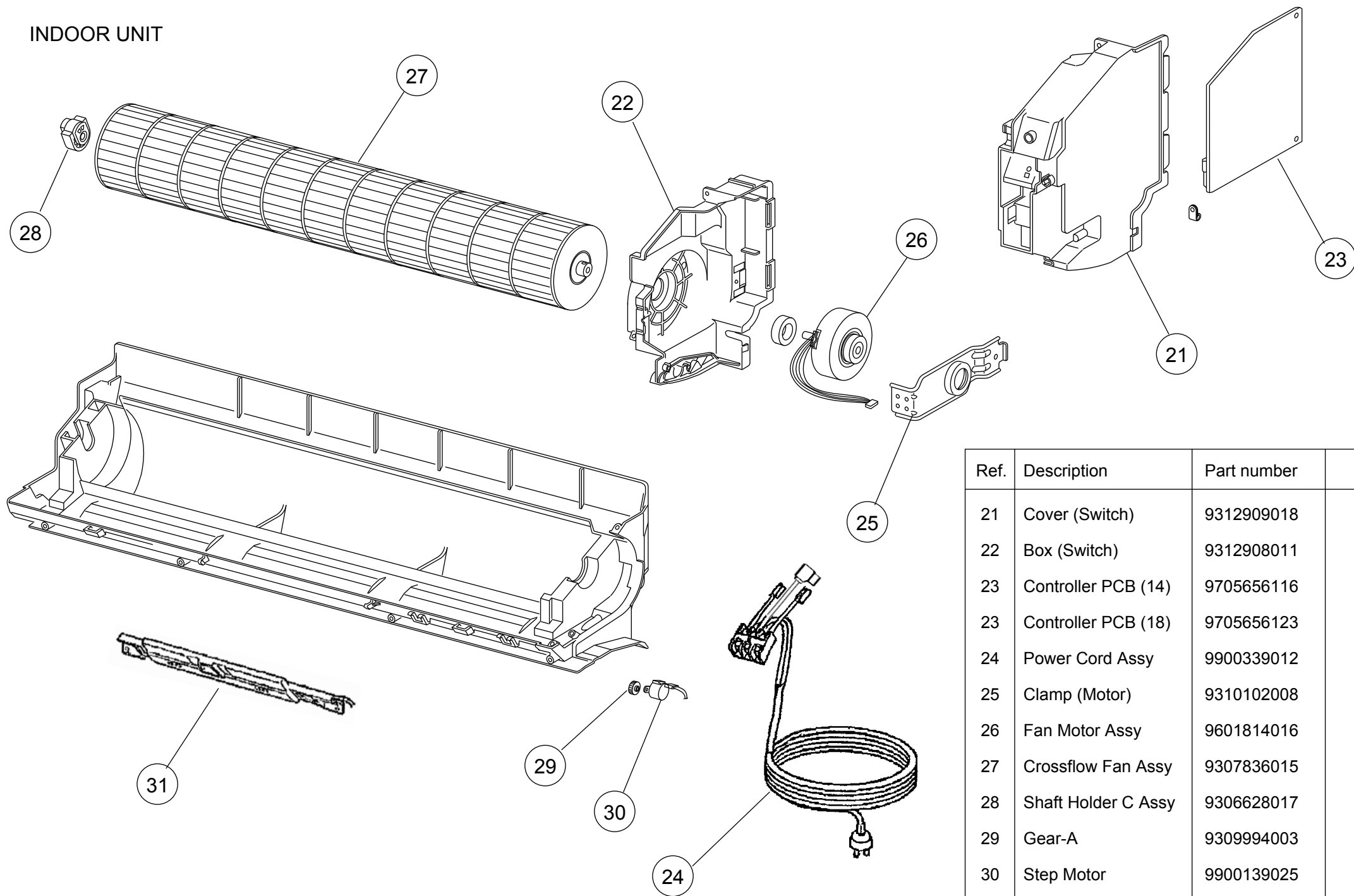
# PARTS

## INDOOR UNIT

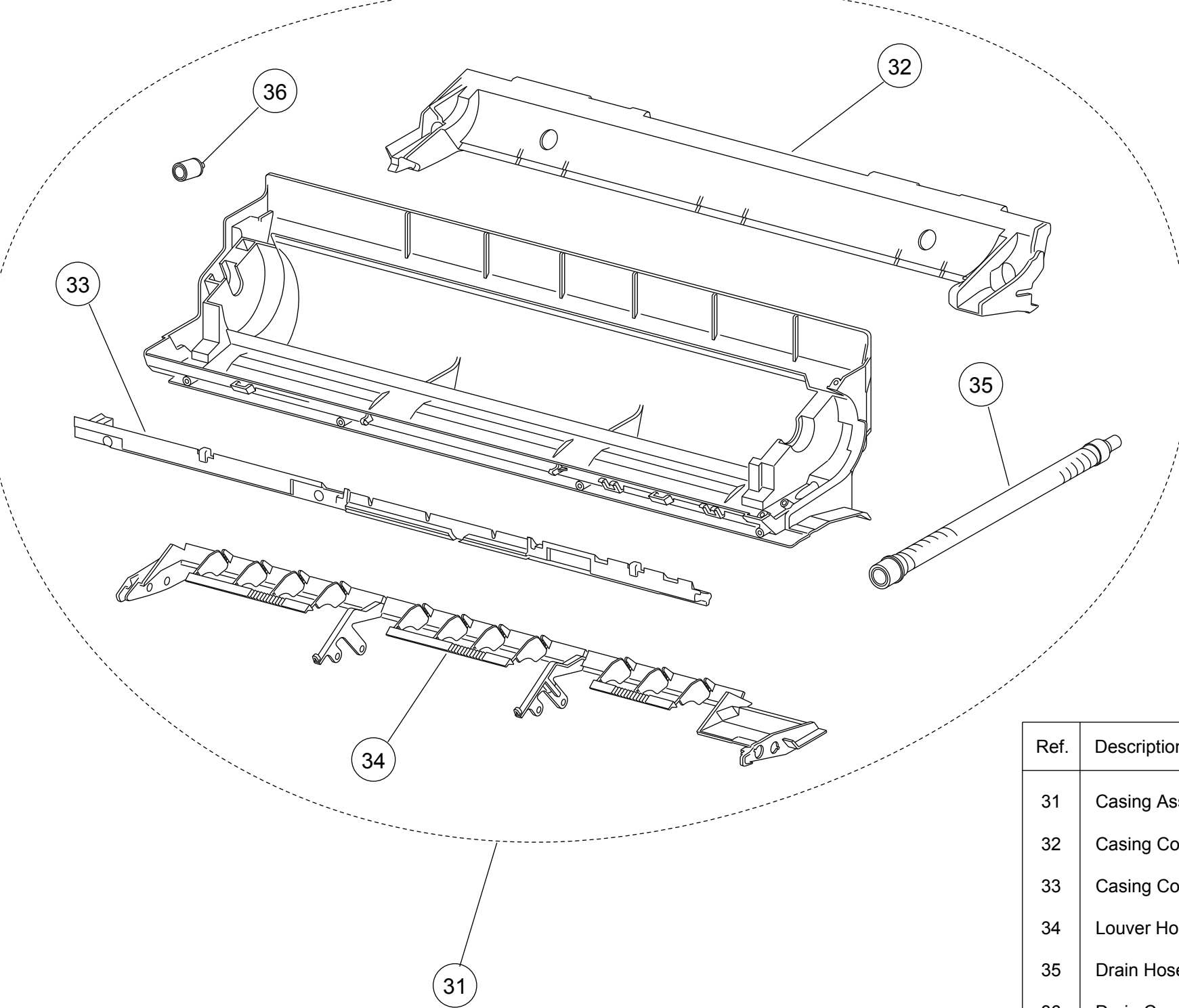


Ref.	Description	Part number
1	Remote Control	9315027030
2	Remote Control Holder	9305642045
3	Bracket Panel	9310001004
4	Air Clean Filter Assy	9312152018
5	Front Panel	9309999053
6	Grille Clamper	9306755010
7	Intake Grille Assy	9313131128
8	Air Filter	9309997011
9	Wire Clamper	9311946014
10	Flow Control Panel U	9309991033
11	Flow Control Panel Z	9309992030
12	Room Thermistor Holder	9311948018

# INDOOR UNIT

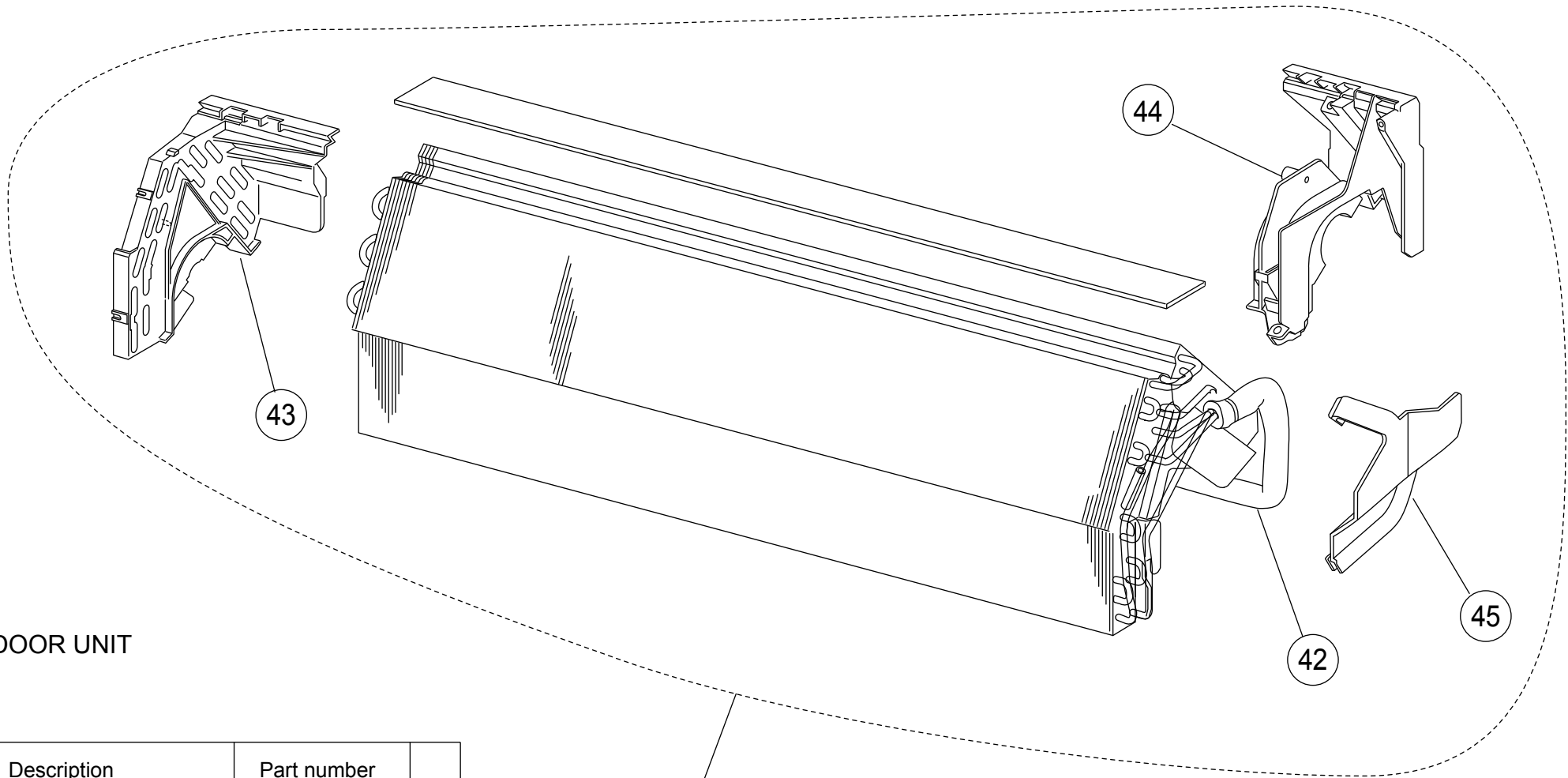


Ref.	Description	Part number
21	Cover (Switch)	9312909018
22	Box (Switch)	9312908011
23	Controller PCB (14)	9705656116
23	Controller PCB (18)	9705656123
24	Power Cord Assy	9900339012
25	Clamp (Motor)	9310102008
26	Fan Motor Assy	9601814016
27	Crossflow Fan Assy	9307836015
28	Shaft Holder C Assy	9306628017
29	Gear-A	9309994003
30	Step Motor	9900139025
31	Display Unit	9705382015



INDOOR UNIT

Ref.	Description	Part number	
31	Casing Assy	9311354079	
32	Casing Cover B	9314160011	
33	Casing Cover F	9309987005	
34	Louver Holder	9309993013	
35	Drain Hose Assy	9314147029	
36	Drain Cap	9316177017	



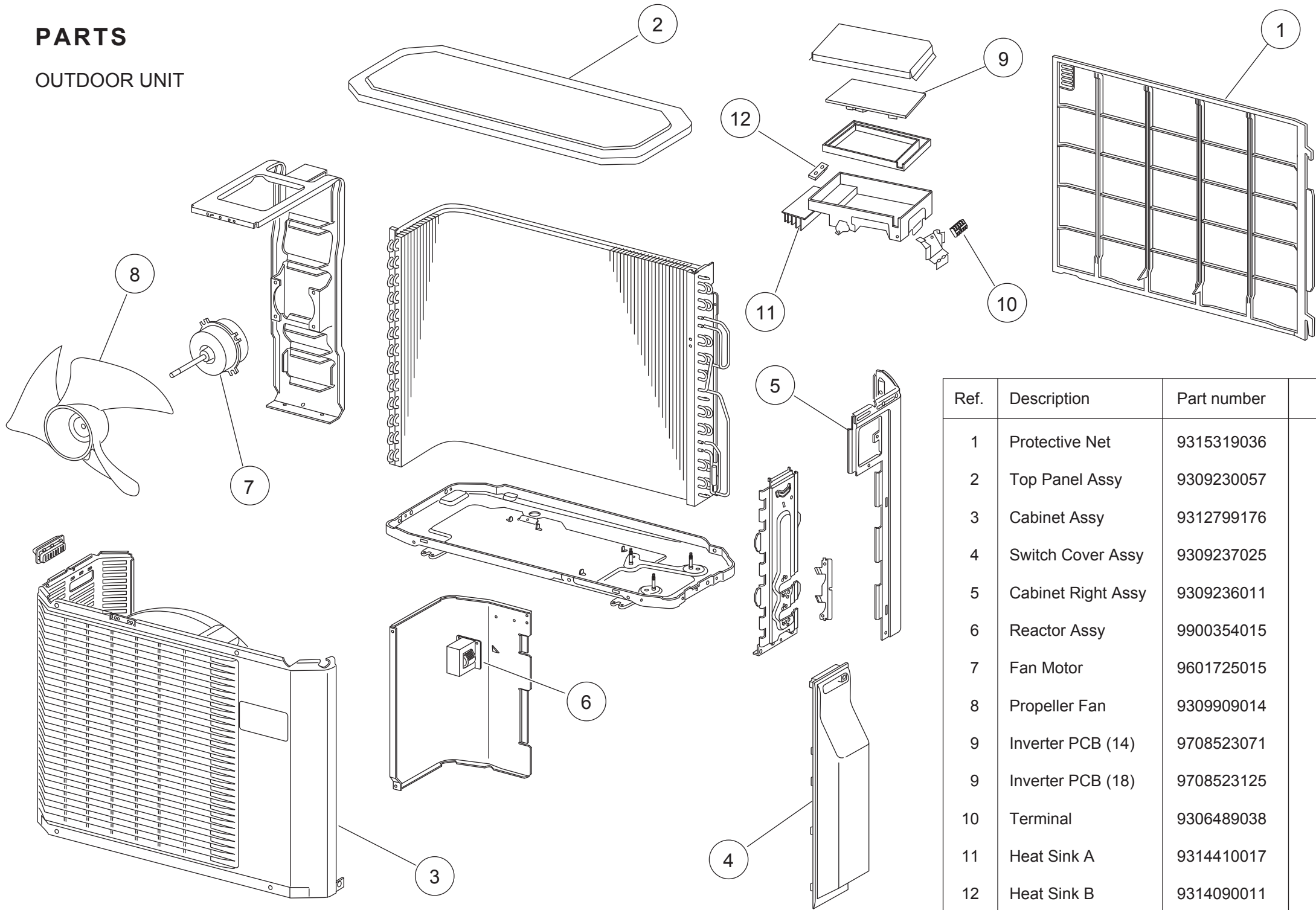
INDOOR UNIT

Ref.	Description	Part number	
41	Evaporator Sub Assy	9313791018	
42	Joint Pipe Assy	9313792015	
43	Holder (Evaporator) L	9309982017	
44	Holder (Evaporator) R	9309983014	
45	Water Seal	9312912018	

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# PARTS

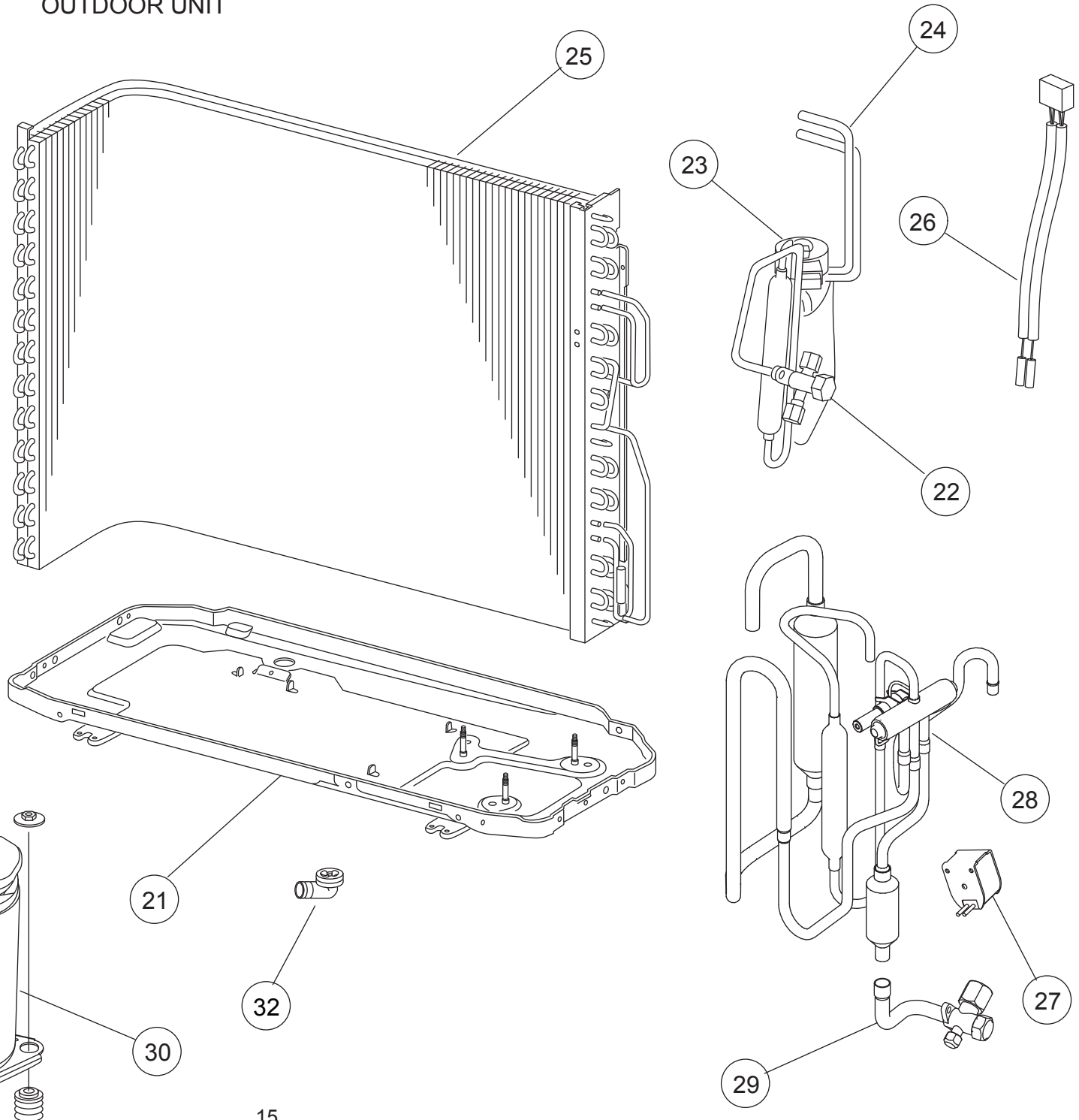
## OUTDOOR UNIT



Ref.	Description	Part number
1	Protective Net	9315319036
2	Top Panel Assy	9309230057
3	Cabinet Assy	9312799176
4	Switch Cover Assy	9309237025
5	Cabinet Right Assy	9309236011
6	Reactor Assy	9900354015
7	Fan Motor	9601725015
8	Propeller Fan	9309909014
9	Inverter PCB (14)	9708523071
9	Inverter PCB (18)	9708523125
10	Terminal	9306489038
11	Heat Sink A	9314410017
12	Heat Sink B	9314090011

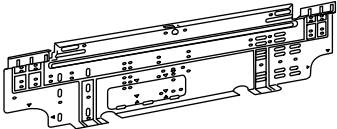

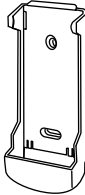

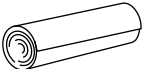


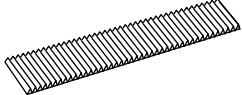
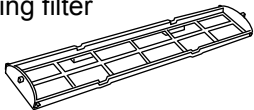
Ref.	Description	Part number
21	Base Assy	9308869081
22	2-way Valve Assy	9970093012
23	Expansion Valve Coil	9900057039
24	Pulse Motor Valve Assy	9311641018
25	Condenser Total Assy	9311381037
26	Thermistor Assy	9900818005
27	Solenoid	9970033018
28	4-way Valve Assy	9315726018
29	3-way Valve Assy	9970092015
30	Compressor Assy	9313763022
31	Outdoor Thermistor	9900210045
32	Drain Assy	9303029015

## OUTDOOR UNIT





## ACCESSORIES

Name and Shape	Part number
Wall hook bracket 	9310001004
Remote control 	9315027030
Remote control holder 	9305642045
Battery (penlight) 	0600185527
Cloth tape 	9310519004
Tapping screw (big) ( $\phi$ 4 x 25) 	0700076046
Tapping screw (small) ( $\phi$ 3 x 12) 	0700019036
Air cleaning filter 	9312153015 9311925033
Air cleaning filter frame 	9306602017

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